JOURNAL FOR EXCELLENCE IN TEACHING AND LEARNING



DOCTORAL STUDENTS' EXPERIENCE AT UNIVERSITY OF LEICESTER

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Keywords:

Student experience, doctoral programmes, distance learning

Funding allocated: £5000

In recent years there has been a growth in the number of taught doctoral programmes, however there has been limited systematic research on the extent to which student experiences differ between taught and traditional modes. This project aimed to contribute to this area by exploring different experiences of learning on the variety of doctoral qualifications offered by the University of Leicester: research only, part-taught and fully taught. Each type of doctoral degree varies in terms of structure, level and amount of contact, the extent of formal teaching interventions and assessment.

1. BACKGROUND

The idea for the research project emerged from professional practice of teaching and supervising students on both taught and traditional doctoral programmes and from realizing that there was limited systematic research on the extent to which student experiences differ between taught and traditional modes. This project contributes to this area by exploring different experiences of learning on the variety of doctoral qualifications offered by the University. Apart from offering a general profile for the students registered for a doctoral degree we present information about the motivational background of students, their learning and student experiences at the University, the role of significant others and students' future and career plans. We also examined whether the structural differences had an impact on how students develop their research questions, how they progress with their research and develop skills and knowledge. Leonard et al. (2006) point out the lack of research data on doctoral students' experiences of different student groups, and the transition from higher education to work. Our research aimed to fill some of the gaps in the literature by addressing the on-course learning experiences of doctoral students at a UK university.

2. PROJECT AIMS AND OBJECTIVES

This project aimed to examine the experiences of learning on the variety of doctoral qualifications offered by the University with the intention of exploring the impact of structure, contact hours, the extent of formal teaching interventions and assessment on:

1. How the student develops and refines their research questions;

- 2. The students develop the 'craft skills' of research;
- 3. The extent to which assessed course work helps in developing skills and knowledge.

In order to obtain answers to our research questions and to fulfil our aims we designed a website (see Annex 1) and conducted an online research among the doctoral students registered at the University. The online questionnaire (see Annex 2) was available for completion between May-July 2010. In total 142 students completed the questionnaire (n=133 after weighting). The data was weighted based on the number of full-time / part-time / distance learning students registered at the University (date of registration February 2010) then analysed in statistical software. The questionnaire addressed students' reasons for doing doctoral level work, their choice of topic and research experience, the organizational climate of their department, their affective responses to the demands of doctoral study, and students' satisfaction and assessments of the graduate experience and their prospective career. These questions are the basis for this analysis of the doctoral experience.

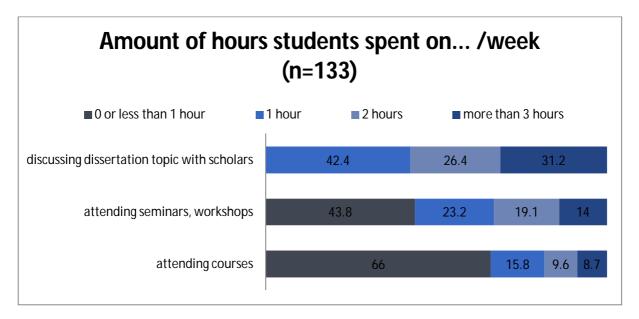
3. PROJECT OUTCOMES AND ACHIEVEMENTS

The aim of the research project was to explore the experiences of learning on the variety of doctoral qualifications offered by the University of Leicester. Our selected research method was on-line questionnaire. In total 142 doctoral level students completed the questionnaire between May-July 2010. To make sure that our findings are representative of the University of Leicester student population at doctoral level the data was weighted based on the number of full-time / part-time / distance learning students registered at the University (date of registration February 2010). After weighting the data we obtained n=133 valid responses. The questionnaire was designed in order to gather information from students about their socio-demographic background; motivation for opting for doctoral studies and future career plans; amount of contact with academics and engagement in academic activities; research and dissertation and further needs of students. The completed questionnaire responses were analysed using SPSS to generate basic descriptive statistics and chi-squared analysis to facilitate examination of the association between variables.

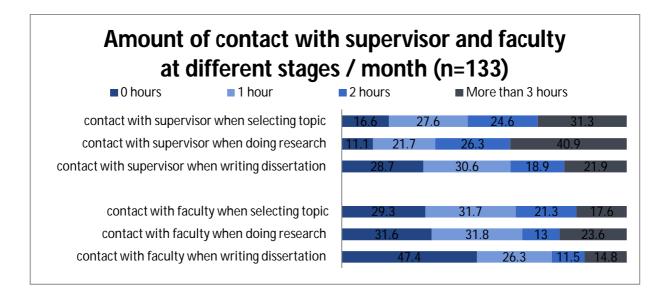
The findings of the study are discussed in three parts focusing on our three main areas of interest: student engagement in learning, research and dissertation experience and doctoral programme experience. We will conclude our paper by bringing these three aspects together and showing that while the findings show a positive picture overall, they also point to some areas for further consideration especially taking into consideration the structural differences of the degree programme.

STUDENT ENGAGEMENT IN LEARNING

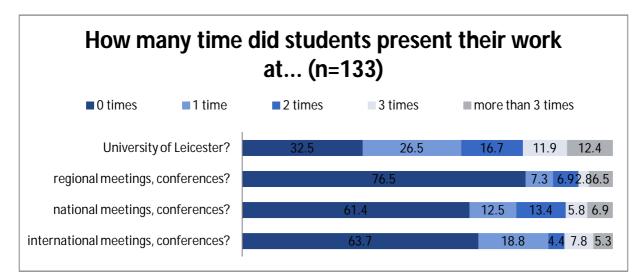
The majority of students (66%) do not attend formal courses, some attend 1 hour (15.8%) or two hours (9.6%) per week; seminars and workshops are more often attended, 56.2% of the students attend several hours on a weekly basis. All doctoral students have discussions about their dissertation topic with scholars on a weekly basis. Almost half of the students (42.4%) spend 1 hour weekly discussing their topic with scholars, 26.4% spend 2 hours weekly and 31.2% spend more than 3 hours weekly.



Since doctoral students are part of a community of researchers, their learning is shaped by the role of significant others in their experience. We asked students about the amount of contact with their supervisor and with other faculty members during the different phases of their doctoral programme. Most of the students (83.4%) report that they met their supervisor at least for 1 hour monthly when selecting their topic, 88.9% met them for 1 hour when doing their research and 71.3% met them for 1 hour when writing the dissertation. The amount of contact with other faculty members was less and decreased as the doctoral programme progressed (70.7%, 68.4% and 52.6%). Male students report to have more contact on average with supervisor and faculty than their female colleagues and they are also more active in terms of presenting their work. As Park (2005) points out the role of supervisor and the nature of the relationship between student and supervisor has a significant impact on the quality of the student experience, time to submission and the likelihood of completion and graduation.



In general doctoral students were more active at university level, 67.5% presented their work at least one time at the university, while at regional meetings 23.5%, at national conferences 38.6% and at international conferences 36.3% took part actively. Full time students are more active locally, 82% full time students presented their work at least one time at a university event compared to 65% of the part time students and 23.8% of the distance learning students. Part time students seem to be more active at regional and national level, 47.5% of the part time students presented their work at a national event compared to 38.4% of the full time students and 23.8% of the distance learning students.

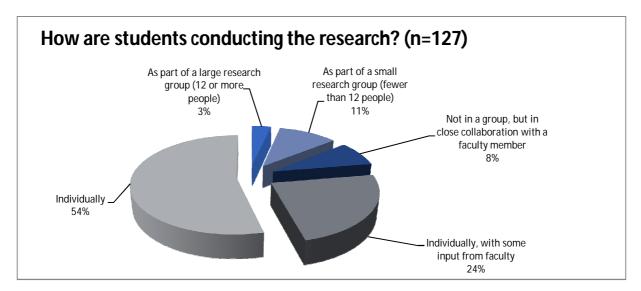


As students progress with their dissertation they are less likely to attend courses, seminars or workshops or to engage in talks about their topic with scholars, while they and more likely to present their work at the university or at national and international conferences and to have publications based on their doctoral work. Around one third (23.1%) of the students has a publication based on his/her doctoral work while almost half (46.2%) of the students who are at writing up stage published their work.

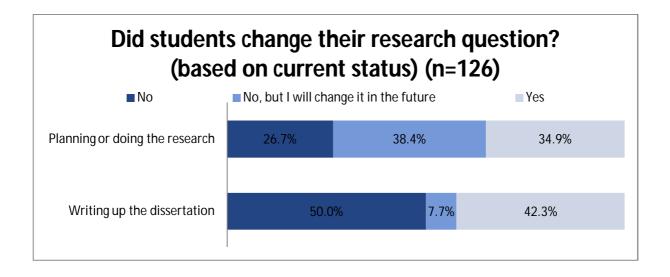
RESEARCH AND DISSERTATION EXPERIENCE

We find Chiang's (2003) two research training structures in our sample as well. The 'individualist research training structure' is more predominant as the majority of the students conduct their research individually (53.9%), or with some input from faculty (23.7%). The 'teamwork research training structure' is present in the experience of 22.4% of the students as 3.5% are part of large research groups, 10.7% are part of smaller research groups and 8.2% are not in a group but they work in close collaboration with faculty members. As Chiang (2003) points out, in the teamwork structure the interaction between students and their supervisors and other faculty members is frequent and informal, while in the individualist structure it is less frequent and rather formal. In our sample, students conducting their research in groups report higher contact with their supervisors and with other faculty members throughout their doctoral programme than their colleagues who work on individual projects.

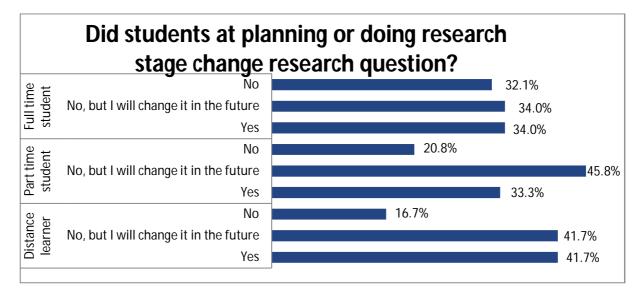
For 39.8% of the students their PhD project is field based, for 26% it is library based, for 14% it is lab based. The students feel a strong interest for their topic and report that it was their own choice; full time students feel stronger that the dissertation is related to their supervisor's topic, while distance learning students state that the topic was their choice.



Students are almost evenly split between remaining with the original or modifying their research question, 30.5% of the students states that they remained with their original research question, 30.1% believe that they will modify it in the future, and 35.6% changed it at least once up to the moment of completing the survey. Half of the students at writing up stage changed their research question in the past and 7.7% feel they will change it in the future while 38.4% of the students in the planning or doing the research part of their doctoral programme feel they will change their research question in the future and 26.7% of them already changed it.



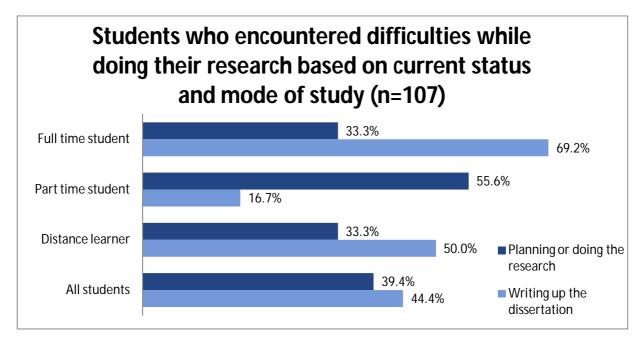
Overall 34.7% of the full time students remained with their original research question, 26.4% feel they will modify it and 38.9% already altered it, while 15% of the distance learning students remained with their original question, 45% feels that they will modify it in the future and 40% modified it already. Full time and part time students at planning or doing their research are more likely to state that they will be changing their research question in the future than their distance learning colleagues. Male students changed their research question more than females and they also foresee more change in the future.



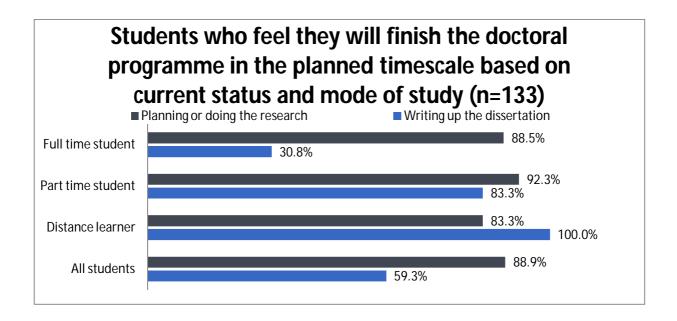
Students belonging to the individualist research training structure seem to be more likely to report changes in their research question than their colleagues who are doing their research as part of a team (42.6% of students on the individualist structure compared to 24.1% of students in the teamwork structure).

When asked if they encountered difficulties while doing their research, 46.5% of the students state that they did not encounter problems and 32.5% report some problems. The number of full time

students (44.4%) reporting difficulties is higher than their part time colleagues (40.6%) or their distance learning colleagues (27.3%). As they are approaching the end of their programme (44.4%) doctoral students report more problems than their colleagues who are at planning or doing the research stage (39.4%). Full time and distance learning students are more likely to report problems at writing up stage and part time students at the initial stages of their doctoral programme. The most often mentioned difficulties encountered were: time-management, work-life balance, lack of financial and technical support for research purposes.



Our respondents were particularly optimistic about their chances of completing their degree, only 20.3% of the students believe that they will not succeed for some reason. Overall Leicester students seem more confident than their colleagues at national level that they will obtain their degree in the planned timescale, 78.9% of Leicester students expect to finish in time compared to 68.5% of the students in PRES (Park 2009, p. 13). Full time students feel less certain about completing their studies in the planned timescale (25% say they will not finish according to plans) while this percentage is less for part time students (15%) and distance learning students (14.3%). Students in the initial stages of their programme feel more confident that they will finish according to schedule (88.9%), while at writing up stage their confidence decreases (59.3%). Full time students in planning or doing research stage of their programme are more confident (88.5%) that they would finish in the planned timescale, than at the writing up stage (30.8%). Part time and distance learning students are mostly confident in all stages that they would finish in the planned timeframe.



The main reasons why students feel that they cannot finish as planned are: lack of time due to work and/or family commitments, difficulties in acquiring primary data, change in research question, problems with supervision, lack of financial support for fieldwork. In order to finish successfully, students rely most on the supervisory support and guidance (4.52 out of 5 on a scale from 1 to 5), then the quality of the reading material (4.39), the opportunities to develop a range of research skills (4.29) and access to appropriate facilities (4.25).

INPORTANCE OF SEVERAL ASPECTS FOR SUCCESSFULLY COMPLETING THE REORES PROCEDUM MAE RASER ON

IMPORTANCE OF SEVERAL ASPECTS FOR SUCCESSFULLY COMPLETING THE DEGREE PROGRAMME BASED ON							
MODE OF STUDY. (5=VERY IMPORTANT, 1=NOT AT ALL IMPORTANT)							
	Full time student	Part time student	Distance learner	All students			
Supervisory support and guidance	4.62	4.24	4.72	4.52			
Quality of reading materials	4.45	4.17	4.59	4.39			
Opportunities to develop a range of research skills	4.30	4.12	4.56	4.29			
Access to appropriate facilities	4.50	3.84	4.15	4.25			
Feedback on coursework	4.05	4.26	4.65	4.22			
The research environment	4.26	3.39	3.83	3.94			
Provision of guidance on institutional standards and expectations	3.85	3.84	4.37	3.93			
Opportunities to develop a range of transferable skills	3.68	3.00	3.76	3.49			

We asked students about their training needs, and they highlight the need for more programmespecific courses (e.g. MATLAB training), and would like the possibility to take part in the UK GradSchool yearly. Part time and distance learning students would welcome training courses specifically aimed at them and possibilities to access training courses online.

DOCTORAL PROGRAMME EXPERIENCE

In general, students are most satisfied with the opportunities to develop a range of research skills (71.2% rate it more positive than they expected), with supervisory support and guidance (67% rate it more positive) and with assessment and feedback (62.4% rate it more positive); they are least satisfied with organization and management (24.4% rate it more negative than they expected), with provision of guidance on institutional standards and expectations (24.1% rate it more negative) and with career and professional development (23.4% rate it more negative).

The majority of the students (64.1%) rate their doctoral programme as a more positive experience overall than they expected and for 20.7% of the students the experience met their expectations, 15.2% felt their experience is not completely satisfactory. There were no significant differences in students' satisfaction based on the research training structure of the doctoral programme, although Chiang (2003, pp. 24-25) in his research found that students belonging to the individualist structure tend to feel more isolated, and excluded from the departments' research community compared to students belonging to team-work research structures where cooperation and interaction is more frequent leading to an inclusive and supportive environment where students are recognized as members of the community. Distance learning students are more satisfied with quality of the programme, interaction with faculty and supervisory support, skills training received than full time and part time students; and they are less satisfied with interaction with fellow doctoral students and sense of community for graduate students as well as the level of financial and technical support they receive.

Compared to national level data (PRES), as presented by Park (2009, p. 12), University of Leicester research students seem to state in higher numbers in a range of aspects that their experience has met or exceeded their expectations. The exceptions are in terms of opportunities to develop transferable skills and provision of institutional standards and expectation, where Leicester students' experience met or exceeded their expectation in lower number.

	UoL 2010	PRES 2009			
Supervisory support and guidance	83% (67% exceeded expectations)	79.7%			
Opportunities to develop a range of research skills	89.2% (71.2% exceeded expectations)	85.9%			
Opportunities to develop a range of transferable skills	82.1% (54.5% exceeded expectations)	84.8%			
Access to appropriate facilities	87.1% (53.9% exceeded expectations)	80.5%			
The research environment	81.8% (51.5% exceeded expectations)	77.1%			
Provision of guidance on institutional standards and expectations	75.9% (37.8% exceeded expectations)	77.1%			
Overall experience of the research degree programme	84.8% (64.1% exceeded expectations)	83.9%			

RESEARCH STUDENTS' EXPERIENCE MET OR EXCEEDED THEIR EXPECTATIONS

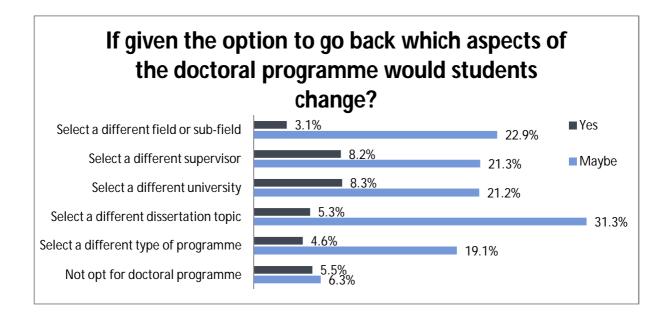
When asked specifically about the University of Leicester, students prove to be most satisfied with the overall quality of their programme and their supervisor, and least satisfied with the sense of community for graduate students. Departmental support for career-life balance seems to be least satisfactory for full time and part time students, while distance learning students complain about the financial support available. As pointed out by Park (2009) in the PRES 2009 results, the professional development and career scale, along with the intellectual climate scale, receive the lowest mean score in students' satisfaction with their doctoral programme. Park (2009, p. 14) highlights that the findings of a regression analysis (based on PRES 2007 data) emphasizes that supervision and intellectual climate have the strongest impact on students' overall doctoral programme experience.

	Full time student	Part time student	Distance learner	All students
Research supervision by your supervisor	1.70	1.48	1.24	1.60
Overall quality of your degree program	1.68	1.67	1.16	1.60
Interaction with primary faculty supervisor	1.71	1.56	1.42	1.63
Provision of library facilities	1.70	1.56	1.55	1.64
Personal progress toward doctoral degree	1.78	1.76	1.65	1.76
Overall quality of skills training you received	1.86	1.70	1.51	1.76
Overall quality of graduate level teaching you received	1.95	1.70	1.47	1.80
Interaction with fellow doctoral students	1.65	2.04	2.16	1.83
Personal progress toward career goals	1.89	1.85	1.73	1.86
Interaction with faculty	1.89	1.84	1.80	1.86
Overall career and life situation	1.95	1.86	1.87	1.91
Level of technical support	2.05	1.73	1.88	1.93
Level of financial support	1.98	1.86	2.72	2.02
Departmental/unit support for career-life balance	2.25	2.19	1.79	2.17
Sense of community for graduate students	2.15	2.45	2.27	2.25

The level of student satisfaction with the different aspects of the doctoral programme at University of Leicester based on mode of study. (1=very satisfied, 5=not at all satisfied)

We asked students about what would have improved their experience and the most often mentioned aspects were: feeling part of a research community, more training courses available online, childcare facilities, funding to attend conferences, office facilities for students, clearer guidance on writing standards and publication opportunities, better communication at departmental level, opportunities for greater social connectivity, rules to protect the rights of doctoral level students.

In general students would recommend stronger the department (92.5%) than the university (91.4%) or the course (89.4%). And if given the chance to go back and start the doctoral programme again the majority of students would not opt for change. From those who would opt for change, they would select a different university (8%) or another supervisor (7.6%). Students feel most undecided about whether they would choose a new topic or stay with the current one (31.5%), and they are most certain that they would not change the fact that they opted for pursuing a doctoral degree (89.2%). They are also happy with the type of programme they opted for (76.9%) and with their field of study (74.1%).



If given the choice to start their doctoral programme again, full time students are most confident that they would not change the type of programme they opted for (70.8%) and least certain about selecting the same university (13.9%) or the same supervisor (11.4%). If given the choice to start their doctoral programme again, part time students are most confident that they would not change their field of study (87.2%) or type of programme (86.5%) while they are hesitant about whether they would select a different supervisor (25.6%) or different dissertation topic (25.6%). If given the choice to start their doctoral programme again, distance learning students are the most certain that they would not opt for a different supervisor (92.3%) or change university (90.5%), while they might reconsider the type of programme they opted for (9.1%). Female doctoral students, if given the choice, would opt for not doing a PhD (7.1%), while the male students would choose a different university (14%).

4. EVALUATION

In order to obtain answers to our research questions and to fulfil our aims we designed an online questionnaire (see Annex 2). Surveys offer an opportunity to collect information on a broader scale, to examine patterns of experience and particularly to investigate the prevalence of certain

experiences associated with doctoral level studies. The questionnaire was available for completion between May-July 2010 and 142 students completed the questionnaire in total (N=133 after weighting). The fact that 12% of the total population completed our survey is a normal percentage in case of web-based research projects. The data was weighted based on the number of full-time / part-time / distance learning students registered at the University (date of registration February 2010) then analysed in statistical software: SPSS. Our data is limited to doctoral students at University of Leicester, but we believe that our findings may be useful in suggesting how the doctoral experience can be improved for many students regarding the everyday ways in which students are taught, supervised, socialized and prepared for future careers.

Based on the findings presented in the previous chapter, we highlight a few issues worthy of further scrutiny. First, we stress the role of supervision and the intellectual climate in which doctoral students are socialized. Our data shows that most of the students have regular contact with their supervisors throughout their degree programme, but the amount of contact is higher in case of students belonging to departments with teamwork research training structure. This finding is especially important as students rely highly on supervisory support for finishing their degree programme in time. Second, most of the students encounter problems and modify their research question as they progress with their degree programme, but full time students and those working individually seem to be keener to report problems and to alter their research, especially as they approach the end of their doctoral programme. They are the ones who feel less optimistic that they will finish successfully as planned and gain a degree. Third, although in general students are mostly satisfied with their degree programme experience and report that their expectations were met or exceeded, there are some areas which need improving, especially the sense of graduate community and communication with other faculty members and students. Departmental support for career-life balance and the level of financial support received are also areas that students regard as being open to improvement. Finally, students seem less satisfied with the university, and if given the choice to go back in time and start the doctoral programme again, they would opt for a different institution, especially students studying full time.

5. CONTINUATION OF THE PROJECT

The findings of the research will be published in peer-reviewed journals and presented at conferences at national and international level. At local level, we sent the findings of the research to the Graduate School, the Student Support and Development Services and the Graduate Media Zoo and we received positive feedback that they are able to use the data provided and develop strategies to enhance the doctoral student learning experience at the University.

We are planning to build on the data obtained and do more research specifically on the learning experiences and support needs of distance learning students.

ACKNOWLEDGEMENTS

We are grateful to the Teaching Enhancement Forum for funding the project; for Brett Dodgson from the Graduate School, Emma Kimberley from the Graduate Media Zoo and to the University of Leicester departments, personal assistants and postgraduate tutors for helping us disseminate the information about the research; and to students who completed the survey.

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